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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,801	01/22/2002	Uma Chandrashekhar	CHANDRASHEKHAR 1-2-1-2-2-	4733

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EXAMINER	
DOAN, DUYEN MY	

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/053,801	CHANDRASHEKHAR ET AL.	
	Examiner	Art Unit	
	Duyen M. Doan	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 May 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 May 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-36 are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 18 is rejected under 35 U.S.C. 102(e) as being anticipated by Bellinger (us 2002/0169858).

As regarding claim 18, Bellinger disclosed an enhanced application portal (EAP), for providing said user interface to said VPN user and receiving therefrom VPN administration commands (see Bellinger pg.4, par 52, pg.5, par 70, also see Fig.1, portal); a policy server, for communicating configuration parameters to network elements providing said VPN, said network configuration parameters determined according to VPN administration commands and profiles associated with said VPN administration commands (see Bellinger pg.3, par 45-46); and a directory server, for storing VPN topology and operational parameters and providing said VPN topology and

operational parameters to said policy server and said EAP, said VPN topology and operational parameters being updated by said EAP (see Bellinger pg.4, par 50-55).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 5-17, 19-20, 25-30, 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellinger et al (us 2002/0169858) (hereinafter Bellinger) in view of Roch et al (us 2005/0088977) (hereinafter Roch).

As regarding claim 1, Bellinger disclosed a plurality of internet protocol (IP) services aggregation switches for communicating between respective access networks and a core network, each of said IP services aggregation switches communicating with at least one respective user (pg.3, par 44, service delivering point); and a dynamic virtual private network (VPN) manager, for providing customer network management and policy server functions including a user interface enabling remote management of a VPN by a user (pg.3, par 49, pg.4, par 50, controller).

Bellinger did not expressly disclosed VPN having at least one of a defined quality of service (QoS) parameter, a defined security parameter and a corresponding billing

rate, at least one of said QoS parameter and said security parameter being adapted in response to user commands provided to said dynamic VPN manager.

Roch taught VPN having at least one of a defined quality of service (QoS) parameter, a defined security parameter and a corresponding billing rate, at least one of said QoS parameter and said security parameter being adapted in response to user commands provided to said dynamic VPN manager (pg.2, par 16-21).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Roch to the system of Bellinger because having the QoS parameter, security parameter and corresponding billing rate, and these parameters response to user command, would enables cost-effective use of a secure VPN tunnel (see Roch pg.1, par 8, 10).

As regarding claim 2, Bellinger-Roch disclosed dynamic VPN manager adapts at least one of said IP services aggregation switches to provide at least one of a guaranteed QoS parameter and a guaranteed security parameter to said VPN (see Bellinger pg.3, par 49).

As regarding claim 5, Bellinger-Roch disclosed QoS parameter comprises at least one of a bandwidth parameter, a jitter parameter and a delay (see Bellinger pg.2, par 14).

As regarding claim 6, Bellinger-Roch disclosed security parameter comprises at least one of an encryption parameter, an authentication parameter and a filtering parameter (see Roch pg.1, par 4-6). The same motivation was utilized in claim 1 applied equally well to claim 6.

As regarding claim 7, Bellinger-Roch disclosed VPN supports at least one of an interactive gaming application and a conferencing application (see Bellinger pg.6, par 80, 87).

As regarding claim 8, Bellinger-Roch disclosed dynamic VPN manager is responsive to a user command to establish an application profile for a VPN, said application profile defining at least one of a QoS parameter, a security parameter and a corresponding billing rate for said VPN during at least one time period (see Roch pg.2, par 16-21); said dynamic VPN manager adapting said at least one of a QoS parameter and a security parameter of said VPN according to said application profile (see Roch pg.2, par 16-21). The same motivation was utilized in claim 1 applied equally well to claim 8.

As regarding claim 9, Bellinger-Roch disclosed a command received from a user comprises a user selection of one of a plurality of VPNs to join (see Roch pg.2, par 21, pg.1, par 7). The same motivation was utilized in claim 1 applied equally well to claim 9.

As regarding claim 10, Bellinger-Roch disclosed a command received from a user comprises a user selection of one of a plurality of applications based on VPNs to join (see Roch pg.1, par 7, pg.2, par 21). The same motivation was utilized in claim 1 applied equally well to claim 10.

As regarding claim 11, Bellinger-Roch disclosed plurality of VPNs have at least one of respective QoS requirements and security requirements, said QoS and security requirements having corresponding billing rates (see Bellinger pg.4, par 55, pg.5, par 64, pg.6, par 80-84).

As regarding claim 12, Bellinger-Roch disclosed plurality of applications have at least one of respective QoS requirements and security requirements, said QoS and security requirements having corresponding billing rates (see Bellinger pg.4, par 55, pg.5, par 64, pg.6, par 80-84).

As regarding claim 13, Bellinger-Roch disclosed an enhanced application portal (EAP), for providing said user interface to said VPN user and receiving therefrom VPN administration commands (see Bellinger pg.4, par 52, pg.5, par 70, also see Fig.1, portal); a policy server, for communicating configuration parameters to network elements providing said VPN, said network configuration parameters determined according to VPN administration commands and profiles associated with said VPN administration commands (see Bellinger pg.3, par 45-46); and a directory server, for storing VPN topology and operational parameters and providing said VPN topology and operational parameters to said policy server and said EAP, said VPN topology and operational parameters being updated by said EAP (see Bellinger pg.4, par 50-55).

As regarding claim 14, Bellinger-Roch disclosed dynamic VPN manager further comprises: at least one element management system (EMS) for managing a plurality of network elements forming said VPN (see Bellinger pg.3, par 49).

As regarding claim 15, Bellinger-Roch disclosed apparatus is included within an internet service provider (ISP) network including said access networks and said core network, said dynamic VPN manager being included within a data center of said ISP (see Bellinger Fg.1, Noc of Internet service provider 10).

As regarding claim 16, Bellinger-Roch disclosed VPN has associated with it a respective name; said user being able to perform at least one of a VPN create, VPN modify, VPN store and VPN delete, command using said VPN name (see Roch pg.2, par 21, Bellinger also disclosed this limitation pg.2, par 16); said VPN modify command allows said user to modify at least one of said VPN's topology, QoS parameter, and security parameter (see Roch pg.2, par 21, Bellinger also disclosed this limitation pg.2, par 16). The same motivation was utilized in claim 1 applied equally well to claim 16.

As regarding claim 17, Bellinger-Roch disclosed VPN is retrieved from storage, activated and deactivated using a corresponding VPN name (see Bellinger pg.2, par 16).

As regarding claim 19, Bellinger-Roch disclosed at least one element management system (EMS) for managing a plurality of network elements forming said VPN (see Bellinger pg.3, par 49).

As regarding claim 20, Bellinger-Roch disclosed a managed VPN has associated with it at least one of a defined quality of service (QoS) parameter, a defined security parameter and corresponding billing rate, at least one of said QoS parameter and said security parameter being adapted in response to said VPN administration commands (see Roch pg.2, par 16-21). The same motivation was utilized in claim 1 applied equally well to claim 20.

As regarding claim 25, Bellinger disclosed retrieving a profile associated with said user request (pg.4-5, par 60-64); and providing configuration parameters to at least one network element in response to said user request or said profile associated with

said user request, said network element adapted by said configuration parameter to satisfy said parameter of said VPN (pg.4-5, par 60-64).

Bellinger did not expressly disclose receiving, from an authorized user, a request to activate, deactivate, join, leave or modify a parameter of a virtual private network (VPN).

Roch taught receiving, from an authorized user, a request to activate, deactivate, join, leave or modify a parameter of a virtual private network (VPN) (pg.2, par 21).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Roch to the system of Bellinger because allow user to activate, deactivate, join, leave or modify a parameter of a virtual private network (VPN), would enables cost-effective use of a secure VPN tunnel (see Roch pg.1, par 8, 10).

As regarding claim 26, Bellinger-Roch disclosed application executes on an enhanced application portal (see Bellinger Fig.1, portal, pg.4, par 52, pg.5, par 70).

As regarding claim 27, Bellinger-Roch disclosed parameter to be modified comprises a quality of service (QoS) parameter, said QoS parameter adapting a data flow through a network such that a minimum QoS level is guaranteed to at least a portion of said VPN traversing said network (see Roch pg.2, par 16-21). The same motivation was utilized in claim 1 applied equally well to claim 27.

As regarding claim 28, Bellinger-Roch disclosed parameter to be modified comprises a security parameter, said security parameter adapting a data flow through a

network such that a minimum security level is guaranteed to at least a portion of said VPN traversing said network (see Bellinger pg.4, par 55, also see Roch pg.2, par 21).

As regarding claim 29, the limitations are similar to claim 5, therefore rejected for the same rationale as claim 5.

As regarding claim 30, the limitations are similar to claim 6, therefore rejected for the same rationale as claim 6.

As regarding claim 33, the limitations are similar to claim 16, therefore rejected for the same rationale as claim 16.

As regarding claim 34, the limitations are similar to claim 17, therefore rejected for the same rationale as claim 17.

As regarding claim 35, Bellinger disclosed retrieving a profile associated with said user request (pg.4-5, par 60-64); and providing configuration parameters to at least one network element in response to said user request or said profile associated with said user request, said network element adapted by said configuration parameter to satisfy said parameter of said VPN (pg.4-5, par 60-64).

Bellinger did not expressly disclose receiving, from an authorized user, a request to activate, deactivate, join, leave or modify a parameter of a virtual private network (VPN).

Roch taught receiving, from an authorized user, a request to activate, deactivate, join, leave or modify a parameter of a virtual private network (VPN) (pg.2, par 21).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Roch to the system of Bellinger

because allow user to activate, deactivate, join, leave or modify a parameter of a virtual private network (VPN), would enables cost-effective use of a secure VPN tunnel (see Roch pg.1, par 8, 10).

As regarding claim 36, Bellinger-Roch disclosed application executes on an enhanced application portal (see Bellinger Fig.1, portal, pg.4, par 52, pg.5, par 70).

Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellinger and Roch as applied to claim 1 above, and further in view of Field (us pat 6778529).

As regarding claims 3, Bellinger and Roch disclosed all limitations of claims 1 above but did not expressly disclose IP services aggregation switches communicate with said at least one respective user via a respective enhanced integrated access device (EIAD).

Field taught IP services aggregation switches communicate with said at least one respective user via a respective enhanced integrated access device (EIAD) (see Field col.4, lines 58-67, col.5, lines 6-23).

It would have obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Field to the system of Bellinger-Roch because having the EIAD communicate between the service provider and the customer would enable the customer device and the internet service provider communicate with each other in different formats (see Field col.5, lines 6-23).

As regarding claim 4, Bellinger-Roch-Field disclosed dynamic VPN manager adapts at least one of said enhanced integrated access devices (EIAD) to provide at least one of a guaranteed QoS parameter and a guaranteed security parameter to said VPN (see Field col.4, lines 58-67, col.5, lines 6-23). The same motivation utilized in claim 3 applied equally well to claim 4.

Claims 21-24, 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellinger in view of Forslow (us 2002/0069278).

As regarding claims 21, Bellinger disclosed all limitations of claims 18 above but did not expressly disclose dynamic VPN manager is included within a Universal Mobile Telecommunications Services (UMTS) packet transport network, said access networks comprising Gateway Generalized Packet Radio Service support nodes (GGSNs), said user accessing said UMTS packet transport network said dynamic VPN manager causing communications with said user communication device to be routed through a GGSN geographically proximate said user communications device.

Forslow taught dynamic VPN manager is included within a Universal Mobile Telecommunications Services (UMTS) packet transport network, said access networks comprising Gateway Generalized Packet Radio Service support nodes (GGSNs), said user accessing said UMTS packet transport network said dynamic VPN manager causing communications with said user communication device to be routed through a GGSN geographically proximate said user communications device (pg.1, par 20-24).

It would have obvious to one with ordinary skill in the art at the time the invention was made to combine the teaching of Field to the system of Bellinger because having the VPN manager included within UMTS would enable the mobile users to roam between access networks with little or no intervention (see Forlsow pg.2, par 27).

As regarding claim 22, Bellinger-Forslow disclosed determination of geographic location is made during an authentication procedure (see Forslow pg.1, par 3-4, pg.2, par 27-30). The same motivation was utilized in claim 21 applied equally well to claim 22.

As regarding claim 23, Bellinger-Forslow disclosed apparatus is included within a CDMA-2000 packet transport network, said access networks comprising home agents, said user accessing said CDMA-2000 packet transport network with a communications device nominally assigned to a home agent (see Forslow pg.1 par 5-10, page 2, par 27-30); said dynamic VPN manager causing communications with said user communication device to be routed through a home agent geographically proximate said user communications device (see Forslow pg.1 par 5-10, page 2, par 27-30). The same motivation was utilized in claim 21 applied equally well to claim 23.

As regarding claim 24, the limitation is similar to claim 22, therefore rejected for the same rationale as claim 22.

As regarding claim 31, Bellinger-Forslow disclosed VPN supports at least one application having associated with it at least one of respective QoS requirements and

security requirements, said QoS and security requirements having corresponding billing rates (see Bellinger pg.4, par 55, pg.5, par 64, pg.6, par 80-84).

As regarding claim 32, Bellinger-Forslow disclosed at least one of an interactive gaming application and a conferencing application (see Bellinger pg.6, par 80, 87).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duyen M. Doan whose telephone number is (571) 272-4226. The examiner can normally be reached on 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner
Duyen Doan
Art unit 2143

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